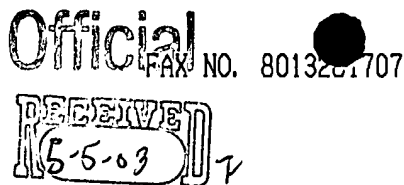


AMENDMENTS TO THE CLAIMS

As reflected below, claims 1-22 and 33-37 have been cancelled, claims 23 and 30 and 32 have been amended, and new claims 38-52 have been added. Accordingly, claims 23-32 and 38-52 are presented for reconsideration in this paper.

Claims 1-22. (Cancelled).



23. (Currently Amended) In a tuning system for tuning to channels of a plurality of different broadcast types including digital broadcasts, a method of efficiently tuning to a channel of one of the broadcast types without a user having to designate the broadcast type, the method comprising the following:

an act of the tuning system storing a plurality of service records in a memory accessible by the tuning system, wherein each service record contains tuning information for tuning to a channel of one of the plurality of broadcast types, the tuning information for each service record including at least a broadcast type identifier and a channel identifier; Ko

when one or more digital data streams are broadcast to the tuning system over one or more digital channels, an act of extracting additional tuning information from the one or more digital data streams, the additional tuning information including at least one of a program number, a program identifier, and a bit stream type; Ko

an act of storing the additional tuning information in one or more of the service records that correspond to one or more digital channels over which the digital data streams were broadcast; Ko

an act of the tuning system categorizing the plurality of service records into a plurality of service spaces;

an act of the tuning system receiving a channel selection from an input device communicatively coupled to the tuning system, wherein the selected channel corresponds to one of the service records in one of the service spaces;

an act of the tuning system accessing the selected service record from the memory; and

an act of the tuning system tuning to the selected channel using the tuning information and any additional tuning information of the accessed service record, wherein the additional tuning information enables the tuning system to automatically tune into the one or more digital data streams broadcast over the one or more digital channels without having to re-extract the additional tuning information that would otherwise be required to tune into the one or more digital data streams. Ko

24. (Original) The method according to Claim 23, wherein the act of the tuning system storing comprises the following:

an act of the tuning system storing information that identifies a tuner in each of the plurality of service records in the memory; and

an act of the tuning system storing information that identifies a channel in each of the plurality of service records in the memory.

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25. (Original) The method according to Claim 23, wherein the act of the tuning system storing comprises the following:

an act of the tuning system accumulating the plurality of service records in the memory.

26. (Original) The method according to Claim 25, wherein the act of the tuning system accumulating the plurality of service records comprises the following:

an act of at least one tuner of the tuning system monitoring at least one broadcast type to determine available channels in the at least one broadcast type.

27. (Original) The method according to Claim 23, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

for each of the plurality of service records, an act of the tuning system storing a pointer associated with the service record in at least one of the service spaces.

28. (Original) The method according to Claim 23, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

an act of the tuning system creating a favorites service space for including service records that correspond to desirable channels.

29. (Original) The method according to Claim 23, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

an act of the tuning system including a plurality of service records of a plurality of broadcast types within a single service space.

30. (Original) The method according to Claim 23, wherein the act of the tuning system tuning to the selected channel using the tuning information and said any additional tuning information of the accessed service record comprises the following:

an act of the tuning system tuning to a selected digital channel corresponding to the accessed service record using the additional tuning information ~~provided in the accessed service record.~~

31. (Original) The method according to Claim 23, wherein the selected service record corresponds to a Web page.

32. (Original) The method according to Claim ~~31~~23, wherein the additional tuning information ~~provided in the selected service record~~ further includes a Uniform Resource Identifier.

Claims 33-37 (Cancelled).

AS 38. (New) A method as recited in claim 23, wherein the additional tuning information includes information obtained from the program map table portion of the one or more digital data streams.

B/c called 39. (New) A method as recited in claim 23, wherein the additional tuning information includes information obtained from the program association table portion of the one or more digital data streams.

40. (New) A computer program product for use in a tuning system for tuning to channels of a plurality of different broadcast types including digital broadcasts, the computer program product comprising computer-readable media having computer-executable instructions for implementing a method of efficiently tuning to a channel of one of the broadcast types without a user having to designate the broadcast type, the method comprising the following:

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an act of the tuning system storing a plurality of service records in a memory accessible by the tuning system, wherein each service record contains tuning information for tuning to a channel of one of the plurality of broadcast types, the tuning information for each service record including at least a broadcast type identifier and a channel identifier;

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when one or more digital data streams are broadcast to the tuning system over one or more digital channels, an act of extracting additional tuning information from the one or more digital data streams, the additional tuning information including at least one of a program number, a program identifier, and a bit stream type;

an act of storing the additional tuning information in one or more of the service records that correspond to one or more digital channels over which the digital data streams were broadcast;

an act of the tuning system categorizing the plurality of service records into a plurality of service spaces;

an act of the tuning system receiving a channel selection from an input device communicatively coupled to the tuning system, wherein the selected channel corresponds to one of the service records in one of the service spaces;

an act of the tuning system accessing the selected service record from the memory; and

an act of the tuning system tuning to the selected channel using the tuning information and any additional tuning information of the accessed service record, wherein the additional tuning information enables the tuning system to automatically tune into the one or more digital data streams broadcast over the one or more digital channels

without having to re-extract the additional tuning information that would otherwise be required to tune into the one or more digital data streams.

41. (New) A computer program product as recited in Claim 40, wherein the act of the tuning system storing comprises the following:

an act of the tuning system storing information that identifies a tuner in each of the plurality of service records in the memory; and

an act of the tuning system storing information that identifies a channel in each of the plurality of service records in the memory.

42. (New) A computer program product as recited in Claim 40, wherein the act of the tuning system storing comprises the following:

an act of the tuning system accumulating the plurality of service records in the memory.

43. (New) A computer program product as recited in Claim 42, wherein the act of the tuning system accumulating the plurality of service records comprises the following:

an act of at least one tuner of the tuning system monitoring at least one broadcast type to determine available channels in the at least one broadcast type.

44. (New) A computer program product as recited in Claim 40, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

for each of the plurality of service records, an act of the tuning system storing a pointer associated with the service record in at least one of the service spaces.

45. (New) A computer program product as recited in Claim 40, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

an act of the tuning system creating a favorites service space for including service records that correspond to desirable channels.

46. (New) A computer program product as recited in Claim 40, wherein the act of the tuning system categorizing the plurality of service records into a plurality of service spaces comprises the following:

an act of the tuning system including a plurality of service records of a plurality of broadcast types within a single service space.

47. (Original) The method according to Claim 40, wherein the act of the tuning system tuning to the selected channel using the tuning information and said any additional tuning information of the accessed service record comprises the following:

an act of the tuning system tuning to a selected digital channel corresponding to the accessed service record using the additional tuning information.

48. (New) A computer program product as recited in Claim 40, wherein the selected service record corresponds to a Web page.

49. (New) A computer program product as recited in Claim 40, wherein the additional tuning information further includes a Uniform Resource Identifier.

50. (New) A computer program product as recited in claim 40, wherein the additional tuning information includes information obtained from the program map table portion of the one or more digital data streams.

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51. (New) A computer program product as recited in claim 40, wherein the additional tuning information includes information obtained from the program association table portion of the one or more digital data streams.

52. (Currently Amended) In a tuning system for tuning to channels of a plurality of different broadcast types including digital broadcasts, a method of efficiently tuning to one or more digital broadcast streams being broadcast over one or more digital channels without a user having to designate the broadcast type, the method comprising the following:

an act of the tuning system storing a plurality of service records in a memory accessible by the tuning system, wherein each service record contains tuning information for tuning to a channel of one of the plurality of broadcast types, the tuning information for each service record including at least a broadcast type identifier and a channel identifier;

when one or more digital data streams are broadcast to the tuning system over one or more digital channels, an act of extracting additional tuning information from the one or more digital data streams, the additional tuning information being extracted from the one or more digital data streams and corresponding specifically to the one or more digital data streams being broadcast over the one or more digital channels;

an act of storing the additional tuning information in one or more of the service records that correspond to one or more digital channels over which the digital data streams were broadcast;

an act of the tuning system categorizing the plurality of service records into a plurality of service spaces;

an act of the tuning system receiving a channel selection from an input device communicatively coupled to the tuning system, wherein the selected channel corresponds to one of the service records in one of the service spaces;

an act of the tuning system accessing the selected service record from the memory; and

an act of the tuning system tuning to the selected channel which is broadcasting the one or more digital data streams and using the tuning information and the additional tuning information of the accessed service record to tune into the one or more digital data streams without having to re-extract the additional tuning information that would otherwise be required to tune into the one or more digital data streams.